

Amendment dated: **PROPOSED**

Reply to Office Action of December 28, 2004

REMARKS/ARGUMENTS

Favorable reconsideration of this application as presently amended and in light of the following discussion is respectfully requested.

Claims 1-3 and 6-27 are pending in the present application with claim 1 having been amended by the present amendment.

In the outstanding Office Action, claims 1, 3 and 6-20 were rejected under 35 U.S.C. § 102(b) as anticipated by Kremer, which is respectfully traversed.

As discussed in the previously filed response, claim 1 was amended to include subject matter similar to that recited in dependent claims 4 and 5 in which the second service signal path includes an add-drop & through path and supports a through path, an east-west add-drop & through path, and a west-east add-drop & through path when the system is operating in an ADM (Add-Drop Mode).

As noted at page 8, lines 25 and 26 of the present invention, in the path configuration in the ADM operation mode, a bidirection add-drop & through paths is included in addition to the conventional service path. Further, as noted in the paragraph beginning at line 1 of page 9, in the add-drop & through path, a path signal received from the east is dropped to a subscriber service processing unit 30, the path signal received from the subscriber service processing unit 30 is added to the west, and the path signal received from the west has a path passed through the east and a path of the opposite direction. At this time, the former path is

Amendment dated: **PROPOSED**

Reply to Office Action of December 28, 2004

called as an east-west add-drop & through path, and such a path configuration is called as "round." Thus, the present invention can implement a one-to-n path configuration in which a path signal is added to system 1 and is dropped to system n, as well as a one-to-one path configuration as in the conventional art in the linear add-drop multiplex network as illustrated in Figure 2. These features are also illustrated in the non-limiting example of Figure 4A in which the add-drop paths also include a through path during an ADM mode.

Further, as noted in the specification, the operation mode of the system is divided into a terminal operation mode, an add-drop operation mode and a ring operation mode (see page 1, lines 24 and 25, for example). In addition, as noted in Figure 3A, during the conventional ADM mode, only the add-drop paths are provided. There is no through path provided during the operation of the conventional ADM mode.

On the contrary, the present invention provides a through path in addition to the add-drop paths during the ADM mode.

The Office Action maintains the previous rejections and indicates the add-drop multiplexer of Kremer is clearly capable of the through path functionality claimed (see item 1 in the response to arguments at page 6 of the Office Action). However, it is respectfully noted that during the add-drop mode, Kremer merely teaches the conventional add-drop paths in the cited section of col. 3, lines 21-34. That is, this section of Kremer merely indicates that the ring nodes 101 through 104 comprise an add-drop multiplexer. It is

Amendment dated: **PROPOSED**

Reply to Office Action of December 28, 2004

respectfully submitted the add-drop multiplexer corresponds to the conventional add-drop multiplexer noted in Figure 3A in which a through path is not provided in addition to the add-drop paths during an add-drop mode.

On the contrary, the present invention uses the claimed add-drop & through paths to handle the voice and low-speed data services in the first service signal path and the variety of high-speed data services in the second service signal path. Thus, the optical transmission system of the present invention can provide new high-speed data service as well as voice and low-speed data services (see page 18, lines 1-6, for example). It is respectfully submitted Kremer does not teach or suggest these features.

Accordingly, it is respectfully submitted independent claims 1, 6 and 12 and each of the claims depending therefrom are allowable.

In addition, it is noted claim 1 has merely been amended to correct a minor grammatical informality and thus does not raise a new issue.

CONCLUSION

In view of the foregoing amendments and remarks, it is respectfully submitted that the application is in condition for allowance. Favorable consideration and prompt allowance are earnestly solicited. If the Examiner believes that any additional changes would place the

Serial No. 09/749,417

Docket No. P-0173

Amendment dated: **PROPOSED**

Reply to Office Action of December 28, 2004

application in better condition for allowance, the Examiner is invited to contact the undersigned attorney, **David A. Bilodeau**, at the telephone number listed below.

To the extent necessary, a petition for an extension of time under 37 C.F.R. § 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this, concurrent and future replies, including extension of time fees, to Deposit Account 16-0607 and please credit any excess fees to such deposit account.

Respectfully submitted,
FLESHNER & KIM, LLP



Daniel Y.J. Kim, Esq.
Registration No. 36,186
David A. Bilodeau, Esq.
Registration No. 42,325

P.O. Box 221200
Chantilly, Virginia 20153-1200
703 766-3701 DYK/DAB:lcw:tlg

Date: April 27, 2005

Please direct all correspondence to Customer Number 34610